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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,901	12/30/2003	Bo-Nam Lee	678-1135 (P10778)	7430

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EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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11/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/748,901

Applicant(s)

LEE, BO-NAM

Examiner

TUAN A. PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-10, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 11, 13, and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 09/10/2007, with respect to the rejection(s) of claim(s) 1-15 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fujii (U.S. Patent No.: 6,334,090).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-3, 7-10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida (U.S. Pub. No.: 2003/0027582) in view of Tashiro et al. (U.S. Patent No.: 6,975,836, hereinafter, "Tashiro") and further in view of Fujii (U.S. Patent No.: 6,334,090).**

Regarding claim 1, Hayashida teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal with at least two communication functions, comprising the steps of (see figure 1, figure 6, GPS reception sensitivity is associated with GPS mode, CDMA reception sensitivity is associated with CDMA mode):

a) checking a reception sensitivity of a reception signal for a prescribed

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communication function among the communication functions (see figure 6, [0046-0051], it is clearly seen that the mobile will measure the sensitivity of a reception signal receive from the base station based on the mode setting of a mobile and displaying the reception sensitivity of the CDMA mode on the display), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the prescribed communication function on the display screen (see figure 6, [0064-0051], displaying the reception sensitivity indicator of a CDMA mode on the display); and

b) if an operation mode of a communication function other than the prescribed communication function is enabled (see figure 1, dual mode receiver, if the GPS mode is enabled), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the communication function corresponding to the enabled operation mode (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10, [0046-0051]), instead of displaying the reception sensitivity indicator of the prescribed communication function (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10 based on the mode selection, if the user select the GPS, the display will display the GPS reception sensitivity indicator, not the reception sensitivity indicator of CDMA, [0046-0051]).

It should be noticed that Hayashida fails to teach the reception sensitivity indicator has a different form between the GPS mode and the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Tashiro teaches such features (see figure 5, GPS reception sensitivity indicator 104 and

103, display reception sensitivity indicator of mobile 106, they are showing as different form, col.7, ln.49-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tashiro into view of Hayashida in order to show the user to recognize which function is currently supporting on the device.

Hayashida and Tashiro, in combination, fails to teach checking reception sensitivity of a reception signal for the communication function corresponding to the enabled operation mode. However, Fujii teaches such features (see figure 3, S6-S9, col.9, ln.1-42, GPS mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujii into view of Hayashida and Tashiro in order to provide the good connection between the mobile and satellite.

Regarding claim 2, Hayashida further teaches if the enabled operation mode is terminated, returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function (see figure 1, figure 6, dual mode receiver, the user can select mode selection between CDMA and GPS and the reception sensitivity indicator will display on the screen corresponding to mode selection).

Regarding claim 3, Hayashida teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal having a mobile communication function for establishing mobile communication over a mobile telecommunication network and a GPS (Global Positioning System) reception function

for receiving a GPS signal from a GPS satellite (see figure 1, figure 6, GPS reception sensitivity is associated with GPS mode, CDMA reception sensitivity is associated with CDMA mode); comprising the steps of:

a) checking a reception sensitivity of a signal received from the mobile telecommunication network (see figure 6, [0046-0051], it is clearly seen that the mobile will measure the sensitivity of a reception signal receive from the base station based on the mode setting of a mobile and displaying the reception sensitivity of the CDMA mode on the display), and displaying a mobile communication reception sensitivity indicator for indicating a mobile communication reception sensitivity on the display screen (see figure 6, [0064-0051], displaying the reception sensitivity indicator of a CDMA mode on the display); and

b) if a GPS mode is enabled (see figures 6-7, the user want to use the GPS function, [0046-0051]), and displaying a GPS reception sensitivity indicator for indicating the GPS reception sensitivity on the display screen (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10, [0046-0051]), instead of displaying the mobile communication reception sensitivity indicator (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10 based on the mode selection, if the user select the GPS, the display will display the GPS reception sensitivity indicator, not the reception sensitivity indicator of CDMA, [0046-0051]).

It should be noticed that Hayashida fails to teach the reception sensitivity

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indicator has a different form between the GPS mode and the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Tashiro teaches such features (see figure 5, GPS reception sensitivity indicator 104 and 103, display reception sensitivity indicator of mobile 106, they are showing as different form, col.7, ln.49-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tashiro into view of Hayashida in order to show the user to recognize which function is currently supporting on the device.

Hayashida and Tashiro, in combination, fails to teach checking reception sensitivity of a reception signal for the communication function corresponding to the enabled operation mode. However, Fujii teaches such features (see figure 3, S6-S9, col.9, ln.1-42, GPS mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujii into view of Hayashida and Tashiro in order to provide the good connection between the mobile and satellite.

Regarding claim 7, Hayashida teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal with at least two communication functions, comprising the steps of (see figure 1, figure 6, GPS reception sensitivity is associated with GPS mode, CDMA reception sensitivity is associated with CDMA mode):

a) checking a reception sensitivity of a reception signal for a prescribed

communication function among the communication functions (see figure 6, [0046-0051], it is clearly seen that the mobile will measure the sensitivity of a reception signal receive from the base station based on the mode setting of a mobile and displaying the reception sensitivity of the CDMA mode on the display), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the prescribed communication function on the display screen (see figure 6, [0064-0051], displaying the reception sensitivity indicator of a CDMA mode on the display); and

b) upon receiving a user request to change the reception sensitivity (see figures 6-7, the user want to use the GPS function, [0046-0051]), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the other communication function (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10, [0046-0051]), instead of displaying the reception sensitivity indicator of the prescribed communication function (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10 based on the mode selection, if the user select the GPS, the display will display the GPS reception sensitivity indicator, not the reception sensitivity indicator of CDMA, [0046-0051]).

It should be noticed that Hayashida fails to teach the reception sensitivity indicator has a different form between the GPS mode and the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Tashiro teaches such features (see figure 5, GPS reception sensitivity indicator 104 and 103, display reception sensitivity indicator of mobile 106, they are showing as different form, col.7, ln.49-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tashiro into view of Hayashida in order to show the user to recognize which function is currently supporting on the device.

Hayashida and Tashiro, in combination, fails to teach checking reception sensitivity of a reception signal for the communication function corresponding to the enabled operation mode. However, Fujii teaches such features (see figure 3, S6-S9, col.9, ln.1-42, GPS mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujii into view of Hayashida and Tashiro in order to provide the good connection between the mobile and satellite.

Regarding claim 8, Hayashida further teaches returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function when a predetermined time has elapsed after the reception sensitivity indicator of the other communication function has been displayed (see [0046-0052], it will take a second when the user press the key to return to selecting the mode).

Regarding claim 9, Hayashida further teaches a user request to change the reception sensitivity indicator of the other communication function while displaying the reception sensitivity indicator of the other communication function, returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function (see figure 1, figure 6, dual mode receiver, the user can select mode selection

between CDMA and GPS and the sensitivity display will display on the screen corresponding to mode selection).

Regarding claim 10, Hayashida teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal having a mobile communication function for establishing mobile communication over a mobile telecommunication network and a GPS (Global Positioning System) reception function for receiving a GPS signal from a GPS satellite (see figure 1, figure 6, GPS reception sensitivity is associated with GPS mode, CDMA reception sensitivity is associated with CDMA mode), comprising the steps of:

a) checking a reception sensitivity of a signal received from the mobile telecommunication network (see figure 6, [0046-0051], it is clearly seen that the mobile will measure the sensitivity of a reception signal receive from the base station based on the mode setting of a mobile and displaying the reception sensitivity of the CDMA mode on the display), and displaying a mobile communication reception sensitivity indicator for indicating a mobile communication reception sensitivity on the display screen (see figure 6, [0064-0051], displaying the reception sensitivity indicator of a CDMA mode on the display); and

b) upon receiving a user request to change the reception sensitivity indicator while displaying the mobile communication reception sensitivity indicator (see figures 6-7, the user want to use the GPS function, [0046-0051]), and displaying a GPS a reception sensitivity indicator for indicating the GPS reception sensitivity on the display screen (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the

display area 10, [0046-0051]), instead of displaying the mobile communication reception sensitivity indicator (see figures 6-7, the mobile display the GPS reception sensitivity indicator on the display area 10 based on the mode selection, if the user select the GPS, the display will display the GPS reception sensitivity indicator, not the reception sensitivity indicator of CDMA, [0046-0051]).

It should be noticed that Hayashida fails to teach the reception sensitivity indicator has a different form between the GPS mode and the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Tashiro teaches such features (see figure 5, GPS reception sensitivity indicator 104 and 103, display reception sensitivity indicator of mobile 106, they are showing as different form, col.7, ln.49-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tashiro into view of Hayashida in order to show the user to recognize which function is currently supporting on the device.

Hayashida and Tashiro, in combination, fails to teach checking reception sensitivity of a reception signal for the communication function corresponding to the enabled operation mode. However, Fujii teaches such features (see figure 3, S6-S9, col.9, ln.1-42, GPS mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujii into view of Hayashida and Tashiro in order to provide the good connection between the mobile and satellite.

Regarding claim 14, Hayashida further teaches returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function when a predetermined time has elapsed after the reception sensitivity indicator of the other communication function has been displayed (see [0046-0052], it will take a second when the user press the key to return to selecting the mode).

3. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida (U.S. Pub. No.: 2003/0027582) in view of Tashiro et al. (U.S. Patent No.: 6,975,836, hereinafter, "Tashiro") and further in view of Fujii (U.S. Patent No.: 6,334,090) as applied to claims 3 and 10 above, and further in view of Lee (U.S. Patent No.: 6,434,484).

Regarding claims 5 and 12, Hayashida, Tashiro, and Fujii, in combination, fails to teach the GPS reception sensitivity indicator displays a reception sensitivity level corresponding to a number of GPS satellites found by the GPS signal. However, Lee teaches such features (see figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Lee into view of Hayashida, Tashiro, and Fujii in order to show the user to recognize which satellite is currently supporting of the device.

Allowable Subject Matter

4. Claims 4, 6, 11, 13, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

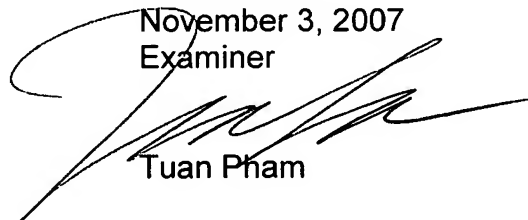
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology 2600
Art Unit 2618
November 3, 2007
Examiner



Tuan Pham